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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,377	11/12/2003	Erol Bozak	09700.0012-00	6379

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

DASGUPTA, SOUMYA

ART UNIT	PAPER NUMBER
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2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

0/706,377

Applicant(s)

BOZAK ET AL

Examiner

Soumya Dasgupta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3/11/2004, 6/17/2005, 4/7/2004, 4/23/2004.

DETAILED ACTION

This is a response to the following case application:

Non-provisional Application No 10/706,377 filed on November 12, 2003.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is not directed to one of the four statutory categories of invention and are thus non-statutory. Furthermore, claims 1-6 has judicial exception (abstract), but it fails to provide a practical application and thus does not produce a tangible result. Furthermore, in claims 1-6, the GUI is a non-functional descriptive matter and is thus non-statutory.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by

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"or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The term "matrix-like structure" is an indefinite term.

5. Claim 4, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because claims 4, 7, the phrase "inferior relation" renders the claims vague and indefinite because such a determination is subjective and thus unclear.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 4 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Vaid et al (US 6,502,131).

With respect to claim 4, Vaid teaches that FIG. 19 illustrates a graphical user interface (GUI) that is a matrix-like structure with columns and rows (examiner notes that the GUI presented has columns and rows), each column representing a computer from a set of computers in the computer grid (row number 1091 has a column of computers), each computer from the set of computers having a grid manager (a grid

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manager can be inferred into the system), and each row representing a grid manager or other application service (row number 1907 can be represented as a row with a service), positions of labels in the structure indicating which computer currently runs which grid manager or other application service (GUI includes labels); a column representing a first computer from the set of computers running a first grid manager (row number 1901 represents a computer which can be inferred to be from a set of computer running a grid manager or service); and one or more columns representing one or more computers from the set of computers running one or more grid managers having an inferior relation with the first grid manager (the term "inferior relations" is subject and thus unclear); and with respect to claim 6 Vaid teaches that in FIG. 19 illustrates a graphical user interface (GUI) that the rows representing application services are structured by application class.

With respect to claim 6, Vaid teaches that FIG. 19 illustrates a graphical user interface (GUI) where the rows representing application services are structured by application class (see rows labeled Rule ~1901, Sender~1903, Receiver~1905, etc).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al (US 6,256,740) in view of Vaid et al (US 6,502,131).

Muller teaches displaying a list structure with columns and rows and using (column 21, line 55 - col 22, line 34, Table VIII); the rows structured hierarchically according to its service instantiation (col 40, lines 55-67).

Muller fails to teach rows and columns representing services in a grid computing network, and hierarchical structure with respect to an application where a service

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belong, a type of service and concrete service instances and the columns represent grid nodes in a graphical user interface.

Vaid teaches displaying a list structure with columns and rows and using a graphical user interface (Fig. 19).

Vaid teaches rows and columns representing services in a grid computing network, and hierarchical structure with respect to an application where a service belong, a type of service and concrete service instances and the columns represent grid nodes for the purpose of teaching a hierarchical grid network (Fig. 19).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Muller with the rows and columns representing services in a grid computing network and the hierarchical structure therein with respect to an application where a service belongs, a type of service and a concrete service instances as taught by Vaid because it allows the user to make a grid network computation with service hierarchy in graphical user interface form.

Muller and Vaid are analogous because a service or application hierarchical structure.

12. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Vaid et al (US 256,740) in view of Microsoft Excel 2000.

Vaid teaches the invention of claim 4 as discussed above.

Vaid fails to teach a shrinkable structure that hides the labels representing grid managers or other application services in the matrix-like structure.

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Microsoft Excel 2000 teaches that a shrinkable structure that hides the labels representing grid managers or other application services in the matrix-like structure for the purpose of hiding labels for columns and rows (pg. 67-68).

It would have been obvious to one having ordinary skill in the art to modify Vaid with adjustable rows, columns, or headers to hide labels for a shrinkable structure as taught by Microsoft Excel 2000 because it allows the user to hide labels by shrinking them thereby simplifying the display.

Vaid and Microsoft Excel 2000 are analogous because they both teach GUIs representing columns and rows.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (6,256,740) in view of Vaid et al (US 256,740).

With respect to claim 7, Muller teaches viewing a sub grid network of a grid network, the sub grid network representing a root node and nodes with inferior relations to the root node, the nodes representing grid managers managing one or more services running on computers in the grid network name (column 17, lines 21-37); querying a grid manager representing the root node for its status and addresses of nodes with inferior relations (the examiner notes that the querying between two nodes anticipates receiving a request); querying inferior grid managers for current status (column 3, lines 34-42, column 39, lines 49-64).

Muller fails to teach a displaying state of the root and inferior grid managers and for each grid manager, a computer system running the grid manage.

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Vaid teaches that in FIG. 19 illustrates a state of the root and inferior grid managers and for each grid manager, a computer system running the grid manager.

It would have been obvious to one having ordinary skill in the art to modify Muller to display a state of the root and inferior grid managers and for each grid manager, a computer system running the grid manager as taught by Vaid because it allows the user to display the current function and relations of grid managers and nodes.

Muller and Vaid are analogous because they both teach the grid management systems.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

This is a provisional obviousness-type double patenting rejection.

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15. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,3 of copending Application No. 10/712,886.

Claims 1 and 3 of application 10/712,886 (from hereon referred to as 712) teaches a graphical user interface (GUI) comprising: a structure with columns and rows, each of the rows representing services in a grid computing network, (Claim 1 of 712 states that the graphical user interface (GUI) comprising: a graph with edges and vertices, the vertices representing grid nodes and the edges representing an association of two grid nodes in a grid computing network), the rows structured hierarchically with respect to an application where a service belongs, a type of service and concrete service instances (Claim 3 of 712 states that the association is hierarchical).

Claims 1 and 3 of 712 fail to teach columns and rows.

Vaid teaches columns and rows representing services in a grid computing network, and hierarchical structure with respect to an application where a service belong, a type of service and concrete service instances and the columns represent grid nodes for the purpose of teaching a hierarchical grid network (Fig. 19).

It would have been obvious to one having ordinary skill in the art to modify 712 to graphical user interface (GUI) comprising: a structure with columns and rows (in place of the edges and vertices), each of the rows representing services in a grid computing network, the rows structured hierarchically with respect to an application where a

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service belongs, a type of service and concrete service instances as taught by Vaid because the two types of structures are well known equivalents.

16. Claims 4 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/712,886 in view of Vaid (US 6,502,131).

→ Claims 4 and 5 of application 10/712,886 (from hereon referred to as 712) teach a graphical user interface (GUI) describing a set of services managing a portion of a computer grid, the GUI comprising: a matrix-like structure with columns and rows, each column representing a computer from a set of computers in the computer grid (Claim 4 of 712 states a graph with vectors and nodes for visualizing a computer grid); each column representing a computer from a set of computers in the computer grid [and] a column representing a first computer from the set of computers running a first grid manager (Claim 4 of 712 states that the nodes representing computers running grid managers); each computer from the set of computers having a grid (Claim 4 of 712 states that the vectors representing relations between pairs of grid managers); each row representing a grid manager or other application service and positions of labels in the structure indicating which computer currently runs which grid manager or other application service (Claim 4 of 712 states to generate a display showing the management services running on the computer); and one or more columns representing one or more computers from the set of computers running one or more grid managers having an inferior relation with the first grid manager (Claim 4 of 712 states that each of the relations defining a first grid manager to be superior to a second

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grid manager and a vector points from a node representing the first grid manager to a node representing the second grid manager); and also teaches a shrinkable structure that hides the labels representing grid managers or other application services (Claim 4 of 712 states an expandable structure showing computer grid applications), respectively.

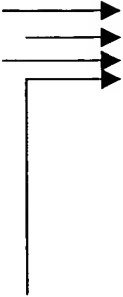
Claim 4 of 712 fails to teach a graph with vectors and nodes, each column representing a computer from a set of computers in the computer grid, each row representing a grid manager or other application service, and a column representing a first computer from the set of computers.

Vaid teaches columns and rows for the purpose representing them with computers and applications services in Fig 19.

It would have been obvious to one having ordinary skill in the art to modify 712 with columns and rows in place of edges, vertices, nodes, and vectors as taught by Vaid because they are both analogous when representing computers and application services.

It would have been obvious to one having ordinary skill in the art to modify 712 as a shrinkable structure because the opposite of a shrinkable structure is an expandable structure.

17. Claim 7 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/712,886 and further in view of Vaid (US 6,502,131).



Claim 5 of application 10/712,886 (from hereon referred to as 712) teaches a method comprising: receiving a request to view a sub grid network of a grid network (Claim 5 of 712 states receiving a request to visualize a grid network with at least one node from a set of linked nodes); the sub grid network representing a root node and nodes with inferior relations to the root node and displaying a state of the root and inferior grid managers and for each grid manager, a computer system running the grid manager (Claim 5 of 712 states displaying nodes corresponding to the grid managers in the first list and drawing vectors from the grid manager to the grid managers in the first list of grid managers); the nodes representing grid managers managing one or more services running on computers in the grid network (Claim 5 of 712 states the nodes representing computers running grid managers and vectors representing relations between pairs of grid managers); querying a grid manager representing the root node for its status and addresses of nodes with inferior relations and querying inferior grid managers for current status (Claim 5 of 712 states sending a first query to the grid manager requesting a first list of grid managers having an inferior relation to the root node).

Claim 5 of 712 fails to teach nodes representing grid managers.

Vaid teaches nodes representing grid managers for the purpose representing them with computers and application services in Fig 19.

It would have been obvious to one having ordinary skill in the art to modify 712 with columns and rows in place of nodes as grid as taught by Vaid because they are both represented with computers and application services.

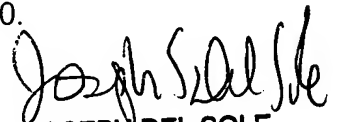
Conclusion

18. The prior art made of record is considered pertinent to applicant's disclosure.
Bozak et al (2005/0027813).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soumya (Ronnie) Dasgupta whose telephone number 571-272-7432. The examiner can normally be reached on M-F 7:30a – 5:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JOSEPH DEL SOLE
SUPERVISORY PATENT EXAMINER
2/13/07